

Injury among Residents of Cochise County, Arizona 2005

Injury is a public health problem that impacts the lives of thousands of Arizona residents each year. Chronic pain, disability, large medical bills, changes in quality of life, and premature death are just some of the possible effects of injuries. These effects can extend beyond injured individuals to their families and communities. With non-fatal injuries, family members are often required to provide care, which can result in time away from work, loss of income, and increases in stress within the family. At the community level, the financial burden of injuries can include medical expenses, rehabilitation, lost wages, and lost productivity. Most injuries are predictable and preventable. Understanding the causes of injury is an important step toward reducing injury-related morbidity and mortality.

The following report identifies the leading causes of injury among residents of Cochise County in 2005. This report is intended to be used as a guide for strategy development, program implementation, and evaluation. The Arizona Department of Health Services Injury Prevention Program operates under the vision of reducing injuries in Arizona using integrated surveillance and evidence-based interventions. This report was generated to increase awareness of county-specific injury issues and to facilitate opportunities for effective injury prevention activities.

Figure 1. Injury Pyramid for Cochise County Residents, Arizona 2005

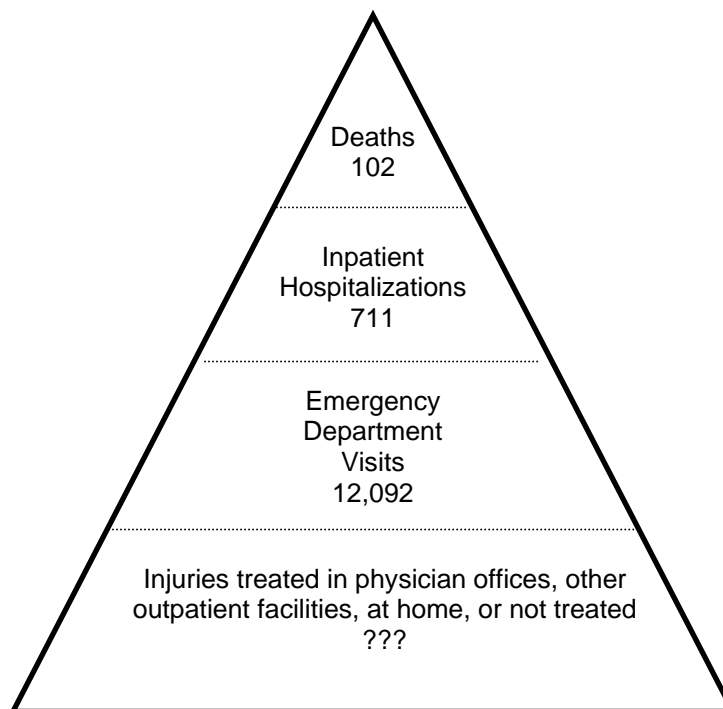


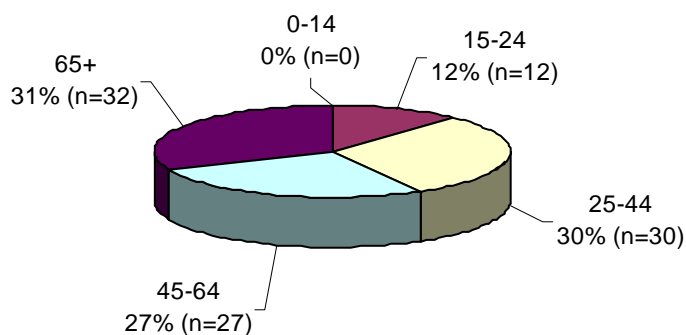
Figure 1 shows an injury pyramid for residents of Cochise County during 2005. This pyramid shows that deaths represent the smallest proportion of injuries. The proportions increase towards the foundation of the pyramid, which is comprised of

hospital discharges, emergency department visits, and self care. Although injuries that do not require medical treatment may be the most numerous, no existing datasets capture these types of injuries.

Deaths

In 2005, there were 102 injury-related deaths in Cochise County. Most of these deaths were among males (77 percent, n=79), and females accounted for 23 percent (n=23). The largest percentage of deaths was among individuals 65 years and older (31 percent, n=32). There were no injury-related deaths among children 14 years and under. Age distributions are shown in Figure 2.

Figure 2. Injury-Related Deaths by Age Group, Cochise County, Arizona 2005 (n=102)



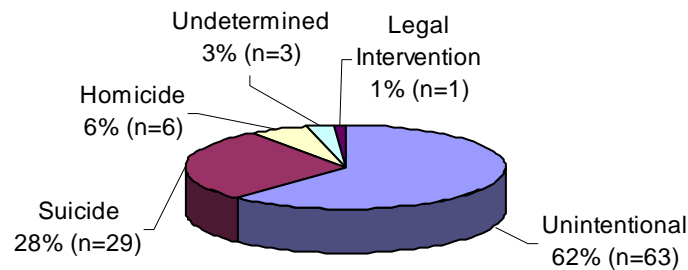
Does not include one male with missing age

Non-Hispanic Whites accounted for the majority of injury-related deaths in Cochise County (76 percent, n=78), followed by Hispanics (17 percent, n=17). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

For the state of Arizona, unintentional injury is the leading cause of death among all residents ages 1 to 44 years. However, for residents of Cochise County, unintentional injury is the leading cause of death for individuals ages 15 to 44 years.¹ Sixty-two percent of injury-related deaths in Cochise County were due to unintentional injuries (n=63); 28 percent were suicides (n=29); 6 percent were homicides (n=6); 3 percent were of undetermined intent (n=3); and 1 percent was due to legal intervention (n=1). Figure 3 shows injury-related deaths by intent.

¹ Arizona Health Status and Vital Statistics 2005.

Figure 3. Injury-Related Deaths by Intent, Cochise County, Arizona 2005 (n=102)



Cochise County Injury-Related Deaths Compared to Other Arizona Counties

Table 1 shows the intent of injury-related deaths for residents of Cochise County compared to residents of the rest of Arizona. The leading intent of injury-related deaths was unintentional for both Cochise County and the remaining counties, accounting for the majority of injury-related deaths. Cochise County had a higher percentage of suicides (28 percent) than the remainder of Arizona and a smaller percentage of homicides (6 percent).

Cochise County (n=102)		Arizona, excluding Cochise County (n=4,488)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	62	Unintentional	66
Suicide	28	Suicide	20
Homicide	6	Homicide	11
Undetermined	3	Undetermined	3

Suicide

Males accounted for the majority of suicides in Cochise County (86 percent, n=25), while females accounted for 14 percent (n=4). There were no suicides among individuals 20 years and under. Fifty-nine percent of suicides were among adults ages 20 to 64 years (n=17), and 41 percent were among adults 65 years and older (n=12). The most common cause of suicide was firearms (76 percent, n=22).

Unintentional Injury

The most common cause of unintentional injury-related deaths in Cochise County was motor vehicle traffic crashes (44 percent, n=28). Nineteen percent of unintentional injury deaths had other/unspecified causes (n=12). The causes of unintentional injury-related deaths during 2005 in Cochise County are shown in Table 2.

Table 2. Causes of Unintentional Injury-Related Deaths among Cochise County Residents, Arizona 2005		
Cause	Number	Percent
Motor vehicle traffic	28	44%
Other/unspecified	12	19%
Poisoning	10	16%
Fall	10	16%
Nature/environment	3	5%
Total	63	100%

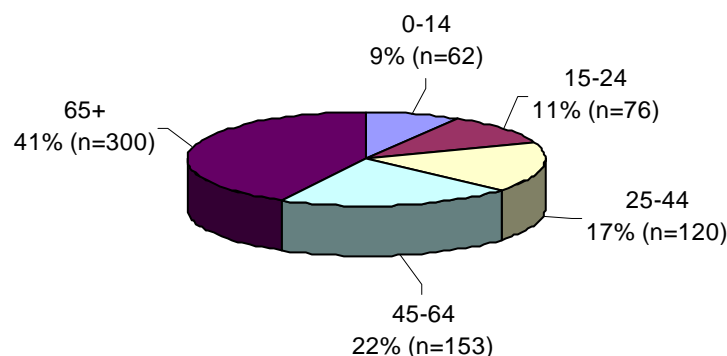
Motor vehicle traffic crashes

Males accounted for 82 percent of unintentional motor vehicle traffic-related deaths (n=23) and females accounted for 18 percent (n=5). Twenty-nine percent were among individuals ages 15 to 24 years (n=8); 64 percent were among individuals ages 25 to 64 years (n=18); and 7 percent were among individuals 65 years and older (n=2). For most of the motor vehicle traffic-related deaths, the location of the injured person was not specified on the death certificate (85 percent, n=24).

Non-Fatal Inpatient Hospitalizations

In 2005, there were 711 non-fatal inpatient hospitalizations due to injury among residents of Cochise County. Fifty-one percent were male (n=361) and 49 percent were female (n=350). Forty-one percent of the hospitalizations were among individuals 65 years and older (n=300). Figure 4 shows injury-related inpatient hospitalizations by age group among residents of Cochise County.

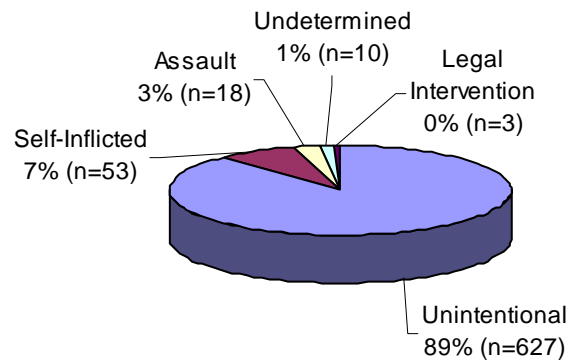
Figure 4. Injury-Related Inpatient Hospitalizations by Age Group, Cochise County, Arizona 2005 (n=711)



There were 544 injury-related hospitalizations among White, Non-Hispanic residents of Cochise County (77 percent). The second highest number was among Hispanic individuals (17 percent, n=118). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

Eighty-nine percent of the inpatient hospitalizations were unintentional (n=627); 7 percent were due to self-inflicted injuries (n=53); 3 percent were due to assaults (n=18); and 1 percent were of undetermined intent (n=10). Three hospitalizations were due to legal intervention. Figure 5 shows injury-related hospitalizations by intent.

Figure 5. Injury-Related Inpatient Hospitalizations by Intent, Cochise County, Arizona 2005 (n=711)



Cochise County Injury-Related Hospitalizations Compared to Other Arizona Counties

Table 3 shows the intent of injury-related hospitalizations for residents of Cochise County compared to residents of the rest of Arizona. The leading intent of injury-related hospitalizations was unintentional for both Cochise County and the remaining counties, accounting for the majority of injury-related hospitalizations. Cochise County had a smaller percentage of hospitalizations due to assaults (3 percent) than the remainder of Arizona (6 percent).

Table 3. Intent of Injury-Related Inpatient Hospitalizations, Cochise County Compared to Other Arizona Counties, 2005			
Cochise County (n=711)		Arizona, excluding Cochise County (n=34,313)	
Intent	Percent of Total	Intent	Percent of Total
Unintentional	89	Unintentional	84
Self-Inflicted	7	Self-Inflicted	8
Assault	3	Assault	6
Undetermined	1	Undetermined	2

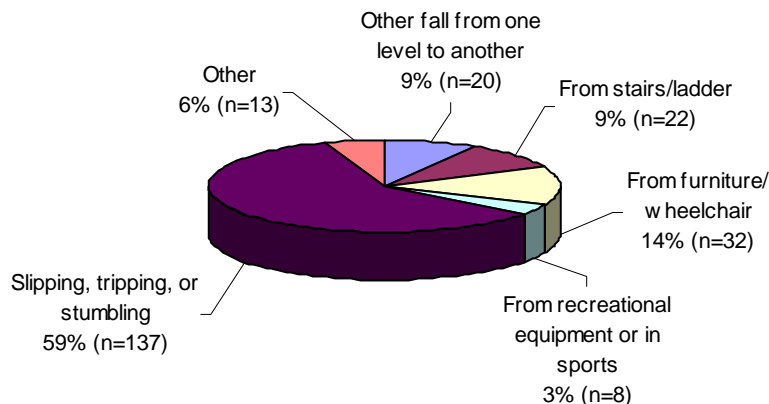
The most common causes of unintentional inpatient hospitalizations in Cochise County were falls (54 percent, n=341) and motor vehicle traffic crashes (16 percent, n=101). Table 4 shows the causes of unintentional inpatient hospitalizations among residents of Cochise County.

Table 4. Causes of Unintentional Injury-Related Inpatient Hospitalizations among Cochise County Residents, Arizona 2005		
Cause	Number	Percent
Fall	341	54%
Motor vehicle traffic	101	16%
Other/unspecified	54	9%
Struck by/against	29	5%
Poisoning	26	4%
Transport	21	3%
Nature/environment	19	3%
Motor vehicle non-traffic	14	2%
Fire/hot object	11	2%
Overexertion	11	2%
Total	627	100%

Falls

Males accounted for 36 percent of unintentional fall-related hospitalizations (n=124) and females accounted for 64 percent (n=217). Six percent of fall-related hospitalizations were among children 14 years and under (n=20); 1 percent were among individuals ages 15 to 24 years (n=2); 21 percent were among individuals ages 25 to 64 years (n=70); and 72 percent were among individuals 65 years and older (n=249). For 32 percent of the unintentional fall-related hospitalizations, information regarding contributing event was not specified in the hospital discharge database (n=109). Among the hospitalizations for which contributing event was specified, 59 percent were due to slipping, tripping, or stumbling (n=137). Figure 6 shows fall-related hospitalizations due to contributing event.

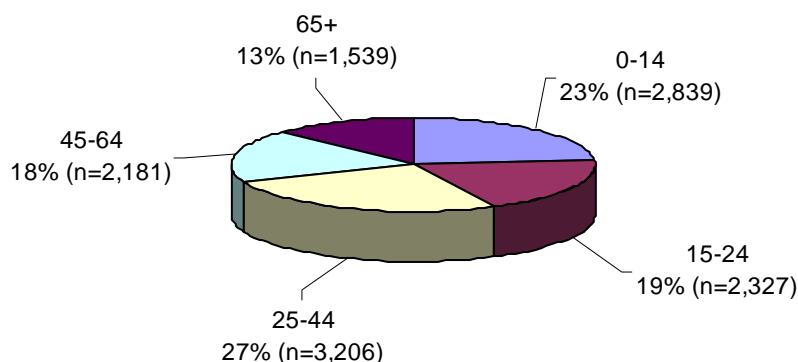
Figure 6. Inpatient Hospitalizations due to Unintentional Falls by Contributing Event, Cochise County, Arizona 2005 (n=232)



Non-Fatal Emergency Department Visits

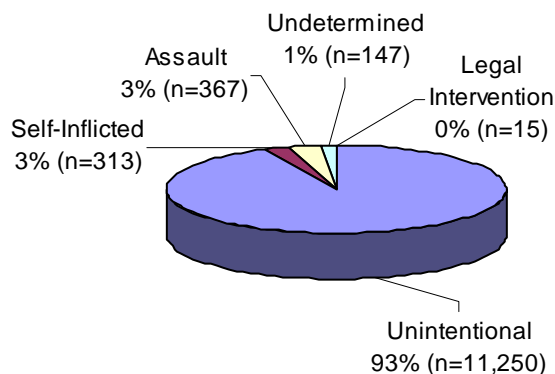
In 2005, there were 12,092 injury-related emergency department visits among residents of Cochise County. Males accounted for 54 percent of these visits (n=6,553) and females accounted for 46 percent (n=5,539). The largest percentage of visits was among individuals ages 25 to 44 years (27 percent, n=3,206). Figure 7 shows injury-related emergency department visits by age group.

Figure 7. Injury-Related Emergency Department Visits by Age Group, Cochise County, Arizona 2005 (n=12,092)



Ninety-three percent of the emergency department visits were due to unintentional injuries (n=11,250); 3 percent were due to assault (n=367); 3 percent were due to self-inflicted injuries (n=313); and 1 percent were of undetermined intent (n=147). There were 15 emergency department visits due to legal intervention. Figure 8 shows emergency department visits by intent.

Figure 8. Injury-Related Emergency Department Visits by Intent, Cochise County, Arizona 2005 (n=12,092)



Cochise County Injury-Related Emergency Department Visits Compared to Other Arizona Counties

Table 5 shows the intent of injury-related emergency department visits for residents of Cochise County compared to residents of the rest of Arizona. The leading intent of injury-related visits was unintentional for both Cochise County and the remaining counties, accounting for the majority of injury-related visits. Overall, Cochise County and the rest of Arizona had similar percentages of visits due to self-inflicted injuries and assaults.

Table 5. Intent of Injury-Related Emergency Department Visits, Cochise County Compared to Other Arizona Counties, 2005			
Cochise County (n=12,092)		Arizona, excluding Cochise County (n=366,579)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	93	Unintentional	94
Self-Inflicted	3	Self-Inflicted	1
Assault	3	Assault	4
Undetermined	1	Undetermined	1

The most common causes of unintentional emergency department visits in Cochise County were falls (28 percent, n=3,093) and struck by/against injuries (14 percent, n=1,595). Table 6 shows the causes of unintentional injury-related emergency department visits for Cochise County residents in 2005.

Table 6. Causes of Unintentional Injury-Related Emergency Department Visits among Cochise County Residents, Arizona 2005		
Cause	Number	Percent
Fall	3,093	28%
Struck by/against	1,595	14%
Overexertion	1,389	12%
Other/unspecified	1,373	12%
Cut/pierce	1,273	11%
Motor vehicle traffic	1,044	9%
Nature/environment	797	7%
Fire/hot object	195	2%
Other pedal cycle	168	2%
Poisoning	165	2%
Motor vehicle non-traffic	158	1%
Total	11,250	100%

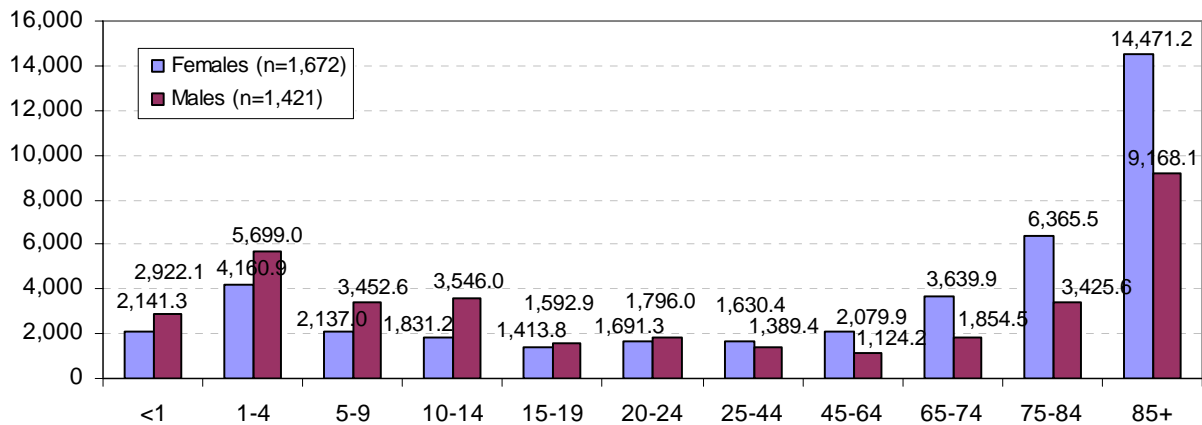
Falls

There were 3,093 emergency department visits due to unintentional falls. Males accounted for 46 percent of these visits (n=1,421) and females accounted for 54 percent (n=1,672). Individuals ages 25 to 64 years had the highest percentage of unintentional fall-related emergency department visits (33 percent, n=1,016). Thirty percent of visits were among children 14 years and under (n=944); 10 percent were

among individuals ages 15 to 24 years (n=297); and 27 percent were among individuals 65 years and older (n=836).

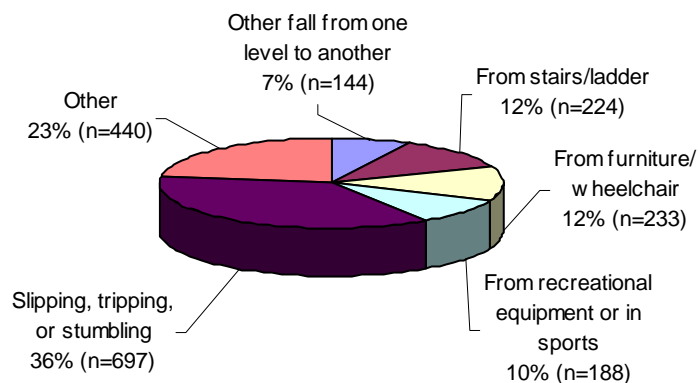
The highest rates of unintentional fall-related emergency department visits were among older adults. Females 85 years and older had a rate of 14,471.2 fall-related emergency department visits per 100,000 residents. Figure 9 shows emergency department visit rates of unintentional falls by age group and gender.

Figure 9. Unintentional Fall-Related Emergency Department Visit Rates per 100,000, Cochise County, Arizona 2005 (n=3,093)



For 38 percent of the unintentional fall-related emergency department visits, information regarding contributing event was not specified in the emergency department database (n=1,167). Among the emergency department visits for which contributing event was specified, 36 percent of falls were due to slipping, tripping, or stumbling (n=697). Figure 10 shows emergency department visits due to unintentional falls by contributing event.

Figure 10. Emergency Department Visits due to Unintentional Falls by Contributing Event, Cochise County, Arizona 2005 (n=1,926)



Summary

In 2005, there were 102 injury-related deaths in Cochise County, and the largest percentage of deaths was among individuals 65 years and older (31 percent, n=32). The majority of these deaths were due to unintentional injuries (62 percent, n=63). The most common cause of unintentional injury deaths was motor vehicle traffic crashes (44 percent, n=28). For residents of Cochise County, unintentional injury is the leading cause of death for individuals ages 15 to 44 years.¹ Twenty-eight percent of injury-related deaths in Cochise County were suicides (n=29); 6 percent were homicides (n=6); 3 percent were of undetermined intent (n=3); and 1 percent were due to legal intervention (n=1).

There were 711 non-fatal inpatient hospitalizations due to injury among residents of Cochise County. Forty-one percent of the hospitalizations were among individuals 65 years and older (n=300). Eighty-nine percent of the hospitalizations were due to unintentional injuries (n=627); 7 percent were due to self-inflicted injuries (n=53); 3 percent were due to assaults (n=18); and 1 percent were of undetermined intent (n=10). The most common cause of unintentional inpatient hospitalizations was falls (54 percent, n=341).

There were 12,092 injury-related non-fatal emergency department visits among residents of Cochise County in 2005. The largest percentage of visits was among individuals ages 25 to 44 years (27 percent, n=3,206). Ninety-three percent of the emergency department visits were due to unintentional injuries (n=11,250); 3 percent were due to assaults (n=367); 3 percent were due to self-inflicted injuries (n=313); and 1 percent were of undetermined intent (n=147). The most common cause of unintentional emergency department visits was falls (28 percent, n=3,093).

Source for deaths: 2005 Death Certificate Database

Source for hospitalizations: 2005 Inpatient Hospital Discharge Database

Source for emergency department visits: 2005 Outpatient Emergency Department Database

Arizona Counties with Population, 2005

